

In the Claims:

Please amend the claims as follows (the changes in these Claims are shown with ~~strikethrough~~ for deleted matter and underlines for added matter). A complete listing of the claims with proper claim identifiers is set forth below.

Amendments to the Claims

1. (Currently Amended) An authentication method for network security, comprising the following steps:

configuring a Media Gateway (MG) with an authentication key and setting a security data package, which is a collection of a security authentication signal and an event, on a network protocol, by a Media Gateway Controller (MGC);

during a security authentication, sending by the MGC a security authentication request containing a security authentication parameter to the MG using the security data package;

performing an encryption calculation and obtaining a calculation result according to the security authentication parameter and the authentication key, by the MG;

reporting the calculation result to the MGC, by the MG; and

determining by the MGC whether the MG is legal by comparing the calculation result obtained according to the security authentication parameter and the authentication key with a result calculated by the MGC,

wherein sending by the MGC a security authentication request comprises:

sending, by the MGC, a Request Notification command or a Modify command to the MG, and,

allocating a Request Identifier to request the MG to detect a security authentication completion event, and
wherein reporting the calculation result to the MGC by the MG comprises:
generating, by the MG, the security authentication completion event, and
checking, by the MG, whether the MGC has requested to report the security authentication completion event,
if the MGC has requested to report the event, sending, by the MG, to the MGC a Notify command with the detected event being the security authentication completion event and a parameter of the event being the encrypted result, a Request identifier of the Notify command being identical to the Request identifier allocated by the MGC.

2. (Original) The authentication method for network security according to claim 1, wherein said network protocol is Media Gateway Control Protocol (MGCP).

3. (Original) The authentication method for network security according to claim 1, wherein said network protocol is H248 protocol.

4. (Cancelled)

5. (Currently Amended) The authentication method for network security according to claim [[4]] 1, wherein the security authentication parameter is a random number.

6. (Cancelled)

7. (Currently Amended) An authentication method applicable in a Next Generation Network (NGN) for network security, comprising the following steps:

configuring a Media Gateway (MG) with an authentication key and setting a security data package, which is a collection of a security authentication signal and an event, on a network protocol, by a Media Gateway Controller (MGC);

during a security authentication, sending by the MGC a security authentication request containing a security authentication parameter to the MG using the security data package;

performing an encryption calculation and obtaining a calculation result according to the security authentication parameter and the authentication key, by the MG;

reporting the calculation result to the MGC, by the MG; and

determining by the MGC whether the MG is legal by comparing the calculation result obtained according to the security authentication parameter and the authentication key with a result calculated by the MGC,

wherein sending by the MGC a security authentication request comprises:

sending, by the MGC, a Request Notification command or a Modify command to the MG, and,

allocating a Request Identifier to request the MG to detect a security authentication completion event, and

wherein reporting the calculation result to the MGC by the MG comprises:

generating, by the MG, the security authentication completion event, and

checking, by the MG, whether the MGC has requested to report the security authentication completion event,

if the MGC has requested to report the event, sending, by the MG, to the MGC a Notify command with the detected event being the security authentication completion event and a parameter of the event being the encrypted result, a Request identifier of the Notify command being identical to the Request identifier allocated by the MGC.

8. (Cancelled)

9. (Currently Amended) A system applicable in a Next Generation Network (NGN) for network security, comprising a Media Gateway (MG) and a Media Gateway Controller (MGC), wherein,

the MGC configures the MG with an authentication key and sets a security data package, which is a collection of a security authentication signal and an event, on a network protocol, sends a security authentication request containing a security authentication parameter to the MG using the security data package during a security authentication;

the MG performs an encryption calculation and obtains a calculation result according to the security authentication parameter and the authentication key, and reports the calculation result to the MGC; and

the MGC determines whether the MG is legal by comparing the calculation result obtained according to the security authentication parameter and the authentication key with a result calculated by the MGC,

the MGC sending a security authentication request to the MG comprises:
sending, by the MGC, a Request Notification command or a Modify command
to the MG, and,
allocating a Request Identifier to request the MG to detect a security
authentication completion event, and
the MG reporting the calculation result to the MGC comprises:
generating, by the MG, the security authentication completion event, and
checking, by the MG, whether the MGC has requested to report the security
authentication completion event,
if the MGC has requested to report the event, sending, by the MG, to the MGC
a Notify command with the detected event being the security authentication completion
event and a parameter of the event being the encrypted result, a Request identifier of
the Notify command is identical to the Request identifier allocated by the MGC.

10. (Cancelled)